EUROPEAN PATENT OFFICE

88/2216

Patent Abstracts of Japan

PUBLICATION NUMBER : 63223833
PUBLICATION DATE : 19-09-88

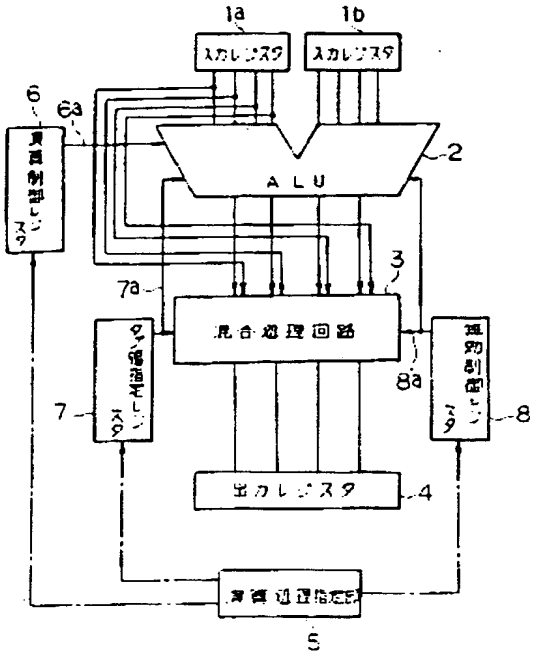
APPLICATION DATE : 13-03-87
APPLICATION NUMBER : 62056444

APPLICANT : FUJI XEROX CO LTD;

INVENTOR : KASUYA ATSUSHI;

INT.CL. : G06F 9/44 G06F 7/00

TITLE : ARITHMETIC UNIT



ABSTRACT : PURPOSE: To improve the processing efficiency at a low cost for an arithmetic unit by excluding the partial bits (tag part) of the parallel input data out of the arithmetic subject and then replacing the tag part excluded previously with a part of the output data.

CONSTITUTION: The parallel input stored in the input registers 1a and 1b undergo the arithmetic processing through an arithmetic part 2 according to a command signal 6a stored in an arithmetic control register 6. In this case, all bits of the input data are defined as the arithmetic processing subjects for execution of arithmetic as long as the contents of a command signal 8a of an invalid control register 8 are equal to '0'. The arithmetic result is outputted as it is to an output register 4. While the partial bits (tag part) of the input data are excluded for execution of arithmetic by a designation signal 7a of a tag width designating register 7 when the signal 8a is equal to '1'. Then a hybrid processing circuit 3 replaces the tag part excluded previously with a part of the data on the arithmetic result of the part 2 and outputs it.